WHAT IS CLAIMED IS:

1. A thin film integrated circuit device comprising:

an insulating film;

a plurality of semiconductor films isolated from one another, which are provided over one surface of the insulating film;

a thin film integrated circuit having the plurality of semiconductor films; and

a metal oxide provided over the other surface of the insulating film.

2. A thin film integrated circuit device according to claim 1, wherein the metal oxide comprises WO_2 or WO_3.

3. A thin film integrated circuit device according to claim 1, wherein the metal oxide is an oxide of an element selected from the group consisting of W, Ti, Ta, Mo, Nd, Ni, Co, Zr, Zn, Ru, Rh, Pd, Os, and Ir; an alloy containing the metal as a main component; or a chemical compound thereof.

4. A thin film integrated circuit device according to claim 1, wherein each of the plurality of semiconductor films functions as an active region

5. A thin film integrated circuit device according to claim 1, wherein each of the plurality of semiconductor films functions as a channel region.

6. An IC label comprising:

an insulating film;

a plurality of semiconductor films isolated from one another which are provided over one surface of the insulating film;

a thin film integrated circuit having the plurality of semiconductor films as an active region; and

an affixing means for affixing a surface of the IC label to a container.

7. An IC label according to claim 6, wherein the IC label is a contactless type.

8. An IC label according to claim 6, wherein the other surface of the IC label can be printed with a character, a letter, text, a symbol, or a diagram.

9. An IC label comprising a contactless thin film integrated circuit, said IC label being adhered to a container,

wherein the thin film integrated circuit comprises:

a plurality of semiconductor film isolated from one another which are provided over an insulating film as an active region;

a gate electrode provided over the semiconductor film; and

an antenna in a same layer as the gate electrode.

10. An IC label according to claim 9, wherein the antenna is formed from a same material as the gate electrode.

11. An IC label according to claim 9, wherein the antenna comprises a conductive paste.

12. An IC label comprising a contactless thin film integrated circuit, said IC label being adhered to a container,

wherein the thin film integrated circuit comprises:

a plurality of semiconductor film isolated from one another which are provided over an insulating film as an active region;

a wiring connected to an impurity region of the semiconductor film; and

an antenna in a same layer as the wiring.

13. An IC label according to claim 12, wherein the antenna comprises a same material as the gate wiring.

14. An IC label according to claim 12, wherein the antenna comprises a conductive paste.

15. A container comprising:

an insulating film;

a plurality of semiconductor films isolated from one another, which are provided over one surface of the insulating film; and

a thin film integrated circuit having the plurality of semiconductor films as an active region,

wherein the thin film integrated circuit is adhered to the container.

16. A container according to claim 15, wherein the thin film integrated circuit is covered by a label.

17. A container according to claim 16, wherein a protective film having a DLC film or a CN film is provided between the thin film integrated circuit and the label.

18. A container according to claim 15, wherein the thin film integrated circuit is held between a first label and a second label, and the second label is affixed to the thin film integrated circuit with an adhesive agent.

19. A container according to claim 15,

wherein a metal oxide is provided over the other side of the insulating film; and

wherein the metal oxide is adhered to the container.

20. A container comprising a contactless thin film integrated circuit that is

adhered to the container,

wherein the thin film integrated circuit comprises:

a plurality of semiconductor films isolated from one another which are provided over one surface of an insulating film as an active region;

a gate electrode that is provided over the plurality of semiconductor films; and

an antenna that is provided in a same layer as the gate electrode,

wherein the other surface of the insulating film comprises a metal oxide.

21. A container according to claim 20, wherein the thin film integrated circuit is covered by a label.

22. A container according to claim 21, wherein a protective film having a DLC film or a CN film is provided between the thin film integrated circuit and the label.

23. A container according to claim 20, wherein the thin film integrated circuit is held between a first label and a second label, and the second label is affixed to the thin film integrated circuit with an adhesive agent.

24. A container comprising a contactless thin film integrated circuit that is adhered to a container,

wherein the thin film integrated circuit comprises:

a plurality of semiconductor films isolated from one another which are provided over one surface of an insulating film as an active region;

a wiring provided over the plurality of semiconductor films; and

an antenna provided in a same layer as the wiring,

wherein the other surface of the insulating film comprises a metal oxide.

25. A container according to claim 24, wherein the thin film integrated circuit is covered by a label.

26. A container according to claim 25, wherein a protective film having a DLC film or a CN film is provided between the thin film integrated circuit and the label.

27. A container according to claim 24, wherein the thin film integrated circuit is held between a first label and a second label, and the second label is affixed to the thin film integrated circuit with an adhesive agent.

28. A manufacturing method of a thin film integrated circuit device, comprising:

forming a metal film over a first substrate;

forming an insulating film in which an oxide film containing silicon and an insulating film containing nitrogen are laminated over the metal film;

forming a semiconductor film over the insulating film;

forming a thin film integrated circuit having the semiconductor film;

adhering a second substrate to the semiconductor film with a first adhesive;

separating the first substrate;

adhering the metal film to a third substrate with a second adhesive; and

removing the first adhesive and separating the second substrate,

wherein a metal oxide is formed over the metal film; and

wherein the separation occurs in a layer of the metal oxide or at a boundary between the metal film and the metal oxide.

29. A manufacturing method of thin film integrated circuit device according to claim 28, wherein the thin film integrated circuit device has an antenna that is formed by means of a printing method using a conductive paste.

30. A manufacturing method of a thin film integrated circuit device according to claim 28,

wherein the oxide film containing silicon is formed over the metal film by

sputtering.

31. A manufacturing method of a thin film integrated circuit device according to claim 30, wherein the metal oxide is formed due to oxidation of a metal when an oxide film containing silicon is formed over the metal film.

32. A manufacturing method of a thin film integrated circuit device according to claim 28, wherein the metal oxide is crystallized by heating.

33. A manufacturing method of a thin film integrated circuit device according to claim 28, wherein removal of the first adhesive and curing of the second adhesive are performed in one step.

34. A manufacturing method of a thin film integrated circuit device according to claim 28, wherein the metal film contains an element selected from the group consisting of W, Ti, Ta, Mo, Nd, Ni, Co, Zr, Zn, Ru, Rh, Pd, Os, and Ir; an alloy containing a metal as a main component; or a chemical compound of a metal.

35. A manufacturing method of a thin film integrated circuit device according to claim 28, wherein the first adhesive is formed from an adhesive containing a UV peelable resin, a heat peelable resin, or a water-soluble resin; or a two-sided tape.

36. A manufacturing method of a thin film integrated circuit device according to claim 28, wherein the second adhesive is formed from an adhesive containing a UV cure resin, a thermosetting resin, or a water-soluble resin; or a two-sided tape.

37. A manufacturing method a thin film integrated circuit device, comprising:

forming a metal film over a first substrate;

forming an insulating film in which an oxide film containing silicon and an insulating film containing nitrogen are laminated over the metal film;

forming a semiconductor film over the insulating film;

forming a thin film integrated circuit by disposing a gate electrode and an antenna in a same layer over the semiconductor film;

adhering a second substrate to the gate electrode and the antenna with a first adhesive;

separating the first substrate;

adhering a third substrate to the metal film with a second adhesive; and

removing the first adhesive and separating the second substrate,

wherein a metal oxide is formed over the metal film; and

wherein the separation occurs in a layer of the metal oxide or at a boundary between the metal film and the metal oxide.

38. A manufacturing method of a thin film integrated circuit device according to claim 37,

wherein the oxide film containing silicon is formed over the metal film by sputtering.

39. A manufacturing method of a thin film integrated circuit device according to claim 38, wherein the metal oxide is formed due to oxidation of a metal when an oxide film containing silicon is formed over the metal film.

40. A manufacturing method of a thin film integrated circuit device according to claim 37, wherein the metal oxide is crystallized by heating.

41. A manufacturing method of a thin film integrated circuit device according to claim 37, wherein removal of the first adhesive and curing of the second adhesive are performed in one step.

42. A manufacturing method of a thin film integrated circuit device according to claim 37, wherein the metal film contains an element selected from the group consisting of

W, Ti, Ta, Mo, Nd, Ni, Co, Zr, Zn, Ru, Rh, Pd, Os, and Ir; an alloy containing a metal as a main component; or a chemical compound of a metal.

43. A manufacturing method of a thin film integrated circuit device according to claim 37, wherein the first adhesive is formed from an adhesive containing a UV peelable resin, a heat peelable resin, or a water-soluble resin; or a two-sided tape.

44. A manufacturing method of a thin film integrated circuit device according to claim 37, wherein the second adhesive is formed from an adhesive containing a UV cure resin, a thermosetting resin, or a water-soluble resin; or a two-sided tape.

45. A manufacturing method of a thin film integrated circuit device, comprising:

forming a metal film over a first substrate;

forming an insulating film in which an oxide film containing silicon and an insulating film containing nitrogen are laminated over the metal film;

forming a semiconductor film including an impurity region over the insulating film;

forming a thin film integrated circuit by disposing a wiring that is connected to the impurity region and an antenna in a same layer over the semiconductor film;

adhering a second substrate to the wiring and the antenna with the first adhesive;

separating the first substrate;

adhering a third substrate to the metal film with a second adhesive; and

removing the first adhesive and separating the second substrate,

wherein a metal oxide is formed over the metal film; and

wherein the separation occurs in a layer of the metal oxide or at a boundary between the metal film and the metal oxide.

46. A manufacturing method of a thin film integrated circuit device according to

claim 45,

wherein an oxide film containing silicon is formed over the metal film by sputtering.

47. A manufacturing method of a thin film integrated circuit device according to claim 46, wherein the metal oxide is formed due to oxidation of a metal when an oxide film containing silicon is formed over the metal film.

48. A manufacturing method of a thin film integrated circuit device according to claim 45, wherein the metal oxide is crystallized by heating.

49. A manufacturing method of a thin film integrated circuit device according to claim 45, wherein removal of the first adhesive and curing of the second adhesive are performed in one step.

50. A manufacturing method of a thin film integrated circuit device according to claim 45, wherein the metal film contains an element selected from the group consisting of W, Ti, Ta, Mo, Nd, Ni, Co, Zr, Zn, Ru, Rh, Pd, Os, and Ir; an alloy containing a metal as a main component; or a chemical compound of a metal.

51. A manufacturing method of a thin film integrated circuit device according to claim 45, wherein the first adhesive is formed from an adhesive containing a UV peelable resin, a heat peelable resin, or a water-soluble resin; or a two-sided tape.

52. A manufacturing method of a thin film integrated circuit device according to claim 45, wherein the second adhesive is formed from an adhesive containing a UV cure resin, a thermosetting resin, or a water-soluble resin; or a two-sided tape.

53. A manufacturing method of a container to which a thin film integrated circuit is adhered, comprising:

forming a metal film over a first substrate;

forming an insulating film in which an oxide film containing silicon and an insulating film containing nitrogen are laminated over the metal film;

forming a semiconductor film over the insulating film;

adhering a second substrate to the semiconductor film with a first adhesive;

separating the first substrate;

adhering a container to the metal film with a second adhesive; and

removing the first adhesive and separating the second substrate;

wherein a metal oxide is formed over the metal film; and

wherein a separation occurs in a layer of the metal oxide or at a boundary between the metal film and the metal oxide.

54. A manufacturing method of a container to which a thin film integrated circuit is adhered, comprising:

forming a metal film over a first substrate;

forming an insulating film in which an oxide film containing silicon and an insulating film containing nitrogen are laminated over the metal film;

forming a semiconductor film over the insulating film;

adhering a second substrate to the semiconductor film with a first adhesive;

separating the first substrate;

adhering a container to the metal film with a second adhesive;

removing the first adhesive and separating the second substrate; and

forming a protective film so as to cover the container,

wherein a metal oxide is formed over the metal film; and

wherein a separation occurs in a layer of the metal oxide or at a boundary between the metal film and the metal oxide.

55. A manufacturing method of container according to claim 54,

wherein the protective film includes DLC.

56. A management method of a product having a container, said container being adhered to a thin film integrated circuit having a semiconductor film provided over one surface of an insulating film and a metal oxide provided over the other surface of the insulating film;

said management method comprising the steps of:

holding the product to a reading means; and

providing information obtained by the reading means to a consumer or a seller.

57. A management method of a product according to claim 56, wherein the information is displayed in a display area that is connected to the reading means.

58. A management method of a product according to claim 56, wherein the reading means is installed in a personal digital assistant.

59. A management method of a product having a container, said container being adhered to a thin film integrated circuit having a semiconductor film provided over one surface of an insulating film and a metal oxide provided over the other surface of the insulating film;

said management method comprising the steps of:

holding the product to a reading means; and

providing information obtained from the reading means to a manufacturer or a seller over a network.

60. A management method of a product according to claim 59, wherein the reading means is installed in a personal digital assistant.